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Appl. No. : 10/646,970
Applicant : Phelps
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Title : Porcine Animals Lacking Any Expression of Functional Alpha 1,3
Galactosyltransferase

Docket No. : 10758.105009 REV1004
Customer No. : 20786

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

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Listing of Claims

Claims 1-18. (Canceled)

Claim 19. (Currently Amended) ~~The method of claim 17,~~ A method for the production of a pig that lacks any expression of functional alpha-1,3 galactosyltransferase (α -1,3 GT) comprising: breeding a male pig heterozygous for an inactivation of the alpha-1,3 GT gene with a female pig heterozygous for an inactivation of the α -1,3 GT gene, wherein one or both pigs are heterozygous due to the presence of a point mutation in an allele of the α -1,3 GT ~~alpha-1,3 GT~~ gene.

Claim 20. (Currently Amended) The method of claim 19, wherein the point mutation is a T-to-G point mutation at the second base of exon 9 of the α -1,3 GT ~~alpha-1,3 GT~~ gene.

Claim 21. (Currently Amended) The method of claim ~~17~~ 19, wherein a male pig that contains a T-to-G point mutation at the second base of exon 9 of the α -1,3 GT ~~alpha-1,3 GT~~ gene is bred with a female pig that contains a T-to-G point mutation at the second base of exon 9 of the α -1,3 GT ~~alpha-1,3 GT~~ gene.

Claims 22 - 42. (Canceled)

Claim 43. (Currently Amended) A non-naturally occurring pig produced according to the method of claim ~~17, 18,~~ 19, 20, ~~or~~ 21, 60 or 66.

Claims 44-47. (Canceled)

Claim 48. (Previously Presented) A cell, tissue, or organ obtained from the pig of claim 43 for

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use as an in vivo or ex vivo supplement or replacement for recipient cells, tissues, or organs.

Claims 49-59. (Canceled)

Claim 60. (Currently Amended) The method of claim 19, ~~17~~ wherein at least one of the male or female pigs comprises at least one allele of an α -1,3 GT ~~alpha-1,3-GT~~ gene that is inactivated via a genetic targeting event.

Claim 61. (Canceled)

Claim 62. (Currently Amended) The cell, tissue or organ of claim 48 wherein at least one allele of an α -1,3 GT ~~alpha-1,3-GT~~ gene is inactivated via a genetic targeting event.

Claims 63-65. (Canceled)

Claim 66. (New) The method of claim 19, further comprising breeding together the pigs that lack any expression of functional α -1,3 GT to produce a herd of pigs that lack any expression of functional α -1,3 GT.